

Course Outcome Guide (COG)

Approved April 13, 2015

Course: DTEC 166	Title: Brake Systems	Credits: 4	Instructor:			
Course Description:	This course covers principles of hydraulic, air and ABS brake components, function and testing procedures found on modern medium and heavy duty trucks.					
Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes			
			Course	General Education or Program	Institutional	
<ul style="list-style-type: none"> For the student to develop a basic understanding of hydraulic, air and ABS brake systems components and their function Develop skills for proper procedures in servicing brake components Develop skills for troubleshooting ABS brake systems Develop knowledge of air brake systems and their function 	<ul style="list-style-type: none"> Identify and describe the function of brake system components Demonstrate proper procedure in servicing brake components Demonstrate knowledge of basic testing and troubleshooting of air systems Perform testing procedures of electronic sensors and actuators used in anti-lock brake systems 	<ul style="list-style-type: none"> Weekly testing Shop performance Demonstration of course specific skills 	<ol style="list-style-type: none"> Demonstrate procedures used in servicing-hydraulic, air and ABS brake systems Demonstrate the ability to identify brake components and explain their proper function Perform skills on troubleshooting and repair of hydraulic, air and ABS brake systems Demonstrate knowledge of federal motor vehicle regulations governed by the department of transportation "DOT" 	<ol style="list-style-type: none"> Make troubleshooting decisions and complete repairs using the proper tools and equipment based on concepts and processes learned in the Transportation program. Be prepared to take NATEF Certification tests. Apply the knowledge acquired for future employment. Apply the knowledge of safety procedures and handling of hazardous material processes to their training and future employment. 	<ol style="list-style-type: none"> Students will demonstrate effective communication skills. Students will use reasoning skills to analyze and solve problems. 	

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